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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/512,384	02/25/2000	Osamu Ohnishi	040447/0211	7238

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FOLEY AND LARDNER
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WASHINGTON, DC 20007

EXAMINER

ODOM, CURTIS B

ART UNIT	PAPER NUMBER
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2634

DATE MAILED: 10/07/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/512,384

Applicant(s)

OHNISHI, OSAMU

Examiner

Curtis B. Odom

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6,9,12 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5,7,8,10,11,13,14 and 16-18 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 17 is objected to because of the following informalities: The phrase "M 1" is suggested to be changed to "M-1". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6, 9, 12, and 15 recite the limitation "said second data and said first data which have been stored in said first memory" in Claim 6. There is insufficient antecedent basis for this limitation in the claim. The claim previously recites the second data is stored in a second memory.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 6, 9, 12, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dabak et al. (previously cited in Office Action 4/17/03).

Regarding claim 6, Dabak et al. discloses an apparatus for detecting a correlation (Fig. 2B and Fig. 8) comprising:

an accumulator (Fig. 2B, block 220, column 4, lines 66-67 and column 5, lines 1-13) which inputs a reception signal to output a first correlation signal in response to the reception signal, the first and correlation signal including first data and second data following the second data (column 6, lines 44-48), wherein sending data serially means that data is sent in order as oppose to simultaneously;

a first memory (Fig. 8, block 810, column 6, lines 46-48) which stores the first data included in the first correlation signal;

a second memory (Fig. 8, block 811, column 6, lines 46-48) which stores the second data included in the first correlation signal; and

an adder (Fig. 8, block 828).

wherein the first data is supplied to the adder in a first period when the first data is written to the first memory (column 6, lines 48-53), wherein the data (element 150) is supplied to the adder (element 186) simultaneously with the registers (elements 152 and 154) as shown in Fig. 1B.,

wherein the second data and the first data which have been stored in the first memory are supplied to the adder in a second period when the second data are written to the second memory (column 6, lines 48-53), wherein the data (element 150) is supplied to the adder (element 186) simultaneously with the registers (elements 152 and 154) as shown in Fig. 1B.,

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wherein an output of the adder is outputted as a final correlation signal (column 6, lines 54-55), wherein the match signal is the correlation signal.

Regarding claim 9, Dabak et al. discloses a spectrum despread apparatus comprising the apparatus according to claim 6 (Fig. 2B, column 4, lines 66-67 and column 5, lines 1-13), wherein the PN signals generated by the device are used to despread a received spread spectrum signal (column 5, lines 5-13).

Regarding claim 12, Dabak et al. discloses a reception terminal comprising the apparatus according to claim 6 (Fig. 2B, column 4, lines 66-67).

Regarding claim 15, Dabak et al. discloses a transmission/reception terminal comprising the apparatus according to claim 6 (Figs. 2A and 2B, column 4, lines 66-67).

Allowable Subject Matter

6. Claims 1-5, 7, 8, 10, 11, 13, 14, and 16-18 are allowable over prior art (if above objections are overcome) because related references do not disclose an L-chip accumulator for generating an intermediate correlation signal from samples created by an oversampling rate which is N-fold of chip rate and a controller for supplying correlation signals to the adder when the correlation signals are supplied to the memory.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tiemann et al. (U.S. Patent No. 6, 118, 808) discloses detecting a correlation using an accumulator, memories, and a controller.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 703-305-4097. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone numbers for the organization where this application or proceeding is assigned are 709-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Curtis Odom
September 29, 2003

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STEPHEN CHIN
SUPERVISORY PATENT EXAMINER
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